



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Moab Field Office
82 East Dogwood
Moab, UT 84532
www.ut.blm.gov

IN REPLY REFER TO:
3809 (U-062)
UTU-69828

CERTIFIED MAIL # 7001 2510 0008 1593 1760
RETURN RECEIPT REQUESTED

July 29, 2003

Ms. Ila Stewart
4196 Wasatch Meadows Drive
West Jordan, UT 84088

Dear Ms. Stewart:

We received your request to extend notice UTU-69828 on December 18, 2002 and have completed a site inspection to determine a reclamation cost estimate for your operation. This reclamation cost estimate has been completed for you and is enclosed for your reference. If you do not agree with the amount as calculated, \$11,204.00, please provide an estimate of your own for our review, recognizing that it must be calculated as if the Bureau of Land Management (BLM) were hiring a third-party contractor to perform reclamation of your operations after you have vacated the project area (43 CFR 3809.554).

Once an amount is agreed upon, you must provide a financial guarantee within sixty (60) days of notification. The BLM will then review your financial guarantee and notify you when it has been accepted. In the interim, your notice is temporarily and conditionally extended for 2 years, until January 20, 2005, in accordance with 43 CFR 3809.333. Additional financial guarantee information is available at <http://www.ut.blm.gov/mineralsadjudication/>. From that web site, scroll down to 'Mining Law/Locatable Minerals' and select the link for 'Surface management bond information.'

A review of case file UTU-69828 indicates that this site has been idle since 1989 and that there has been mining debris and trash at this site since at least 1991. A documented telephone conversation between yourself and Sal Venticinque of this office indicates that you agreed to remove that debris by the fall of 1994. However, our recent inspections and photographs indicate that although a shed and a building were removed within that time frame, there is still a considerable amount of debris including a refrigerator and empty barrels that needs to be removed by January 1, 2004.

To discuss mining operations and reclamation opportunities at this site, please contact Denice Swanke at (435)259-2141. Thank you for your assistance in bringing your operation into compliance with the new 3809 regulations.

RECEIVED

AUG 04 2003

DIV. OF OIL, GAS & MINING

Sincerely,

Margaret Wyatt

Margaret Wyatt
Field Office Manager

Enclosures:

Reclamation cost estimate
Reclamation cost model
Aerial photograph/map of site disturbance

cc: **Paul Baker**

Utah Department of Natural Resources
Division of Oil, Gas and Mining
1594 West North Temple Suite 1210
Salt Lake City, Utah 84114-5801
Re: DOE/019/031

Warren Stewart
1245 Knutson
Moab, Utah 84532

bcc: Opie Abeyta, U-924 (w/o enclosures)
T. Snyder, U-923

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DIV. OF OIL, GAS & MINING

Reclamation Cost Model				
For Existing Notice Level Operation UTU-69828				
Dozer Work				Earthwork
	Acres		Cost/Acre	
Light	2.7	Recontouring Cost	\$ 330.00	\$891.00
Moderate	0.5	Recontouring Cost	\$ 990.00	\$495.00
Heavy	0	Recontouring Cost	\$1,485.00	\$0.00
Excavator Work				
Roads with the side Slope,	Linear Feet		Cost/Linear Foot	
<30%	3000	Recontouring Cost	\$ 1.50	\$4,500.00
>30%	0	Recontouring Cost	\$ 2.40	\$0.00
Areas of non-road disturbance where the use of dozer wouldn't be adequate.				
	Acres		Cost /Acre	
<30%	0	Recontouring Cost	\$4,665.00	\$0.00
>30%	0	Recontouring Cost	\$7,465.00	\$0.00
Revegetation				Revegetation
	Acres		Cost/Acre	
Non-Road disturbances with machine spreader	0	Revegetation Cost	\$ 600.00	\$0.00
Non-Road disturbances with manual spreading	2.7	Revegetation Cost	\$150.00	\$405.00
	Linear Feet		Cost/Linear Foot	
Road disturbances with machine spreader	0	Revegetation Cost	\$ 0.20	\$0.00
Road disturbances with manual spreader	3000	Revegetation Cost	\$0.05	\$150.00
Mobilization				Mobilization
	No. Pieces of equipment		Cost/Piece	
	1	Mobilization Cost	\$ 750.00	\$750.00
Total Labor Cost	\$1,794.50		Total Reclamation Cost	\$7,191.00
Administrative Fees		Contractors Profit	10% Rec. Cost	\$719.10
		Contract Administration	16% Rec. Cost	\$1,150.56
		Contingency	10% Rec. Cost	\$719.10
		Indirect Cost Rate	17.8% Rec. Cost	\$1,280.00
		Engineering/Design	2% Rec. Cost	\$143.82
		*Insurance	1.5% Labor Cost	\$0.00
		*Bond Maintenance	3% Rec. Cost	\$0.00
* Only Administered if Estimated Contract Costs over \$100,000.				
		Total Administration Cost		\$4,012.58
		Bond Amount		\$11,203.58

Reclamation Cost Model for Existing Notice Level Operations.

This model is provided as an optional method to simplify the reclamation cost estimate requirements. It is not a required method for the operator and/or BLM staff to use in calculating reclamation costs. An engineering cost analysis is always an acceptable alternative. This model is not all-inclusive and does not cover every aspect of reclamation. If the estimate from this model does not cover all the required reclamation, it may be augmented with other calculations to aid in obtaining a complete reclamation cost estimate that meets the requirements of 43 CFR § 3809.500. The use of this model may not be appropriate in unique and/or unusual situations where another method of cost calculation may be more suitable.

This model's cost inputs include mobilization/demobilization, labor, equipment (dozer, excavator), revegetation and administrative costs. Other costs such as drilling/blasting, trucking and other types of equipment/procedures must be calculated separately.

Types of Dozer Work

Calculations were based on a Caterpillar D-6 sized dozer with an unspecified blade type and rippers spaced at three feet working on a one-acre plot. The D-6 size was chosen for the calculations on the basis of its size in relation to the size of the notice level disturbances. A larger dozer may be too much machine for the majority of notice level operations. The larger piece of equipment would cost more per hour and would require width and height permits and a pilot car for mobilization. If the use of a larger dozer would be beneficial on specific sites, it would be easy to insert the adjusted hourly rate in the appropriate cost equation below.

The hourly rate for dozer work was averaged from several Utah excavation companies and includes adjusted operator wages. With the use of the excavation companies costs and the Caterpillar Handbook, a \$/acre cost was calculated for the three categories of dozer work. Calculation factors and their rationale are included in the dozer categories that follow.

Light

The area for this type of work has little or no slope, is relatively flat with little contour, and has good access with ease of maneuverability. This category of dozer work is basically used for ripping pads, roads and shallow slopes that require little or no contouring (blade work) and have low maneuver times.

The factors involved in this calculation include; lower maneuver time, high job efficiency and no increase in cycles/acre because the work is not complex. Basically, this is just driving the dozer over a calculated area (while ripping) with a low amount of maneuvering.

Calculation Factors.

Dozer Speed 1mph = 88ft/min

Cycle length 209ft = 1cycle

35cycles/acre

Cycle Time 2.38min + .25min(manuever time) = 2.63min

Job Efficiency 50min/hr (.83)

Site Condition Factor 10%

Dozer Cost/hr \$150.00 (includes adjusted operator wage)

Calculation

$((209\text{ft}/\text{cycle} * 1\text{min}/88\text{ft}) + .25\text{min}) = 2.63\text{min}/\text{cycle}$ $1\text{cycle}/2.63\text{min}$

$(1\text{cycle}/2.63\text{min} * 50\text{min}/\text{hr}) = 19.0\text{cycles}/\text{hr}$ $1\text{hr}/19.0\text{cycles}$

$(1\text{hr}/19.0\text{cycles} * 35\text{cycles}/\text{ac}) = 1.84\text{hr}/\text{ac}$

Round up to 2 hrs @ \$150/hr

$\$300.00/\text{ac} * 10\% = \$330/\text{ac}$

Moderate

The area for this type of work has mild to moderate slopes and will require some contouring and ripping for the reclamation. The site has fair to good access for maneuverability, and may require moderate push work to fill pits/trenches, contouring, some ripping and roadwork that would require blading.

Some of the contributing factors involved in this calculation include; a higher maneuver time due to more involved topography. Lower job efficiency also due to more involved topography. Increased cycles/acre because the amount of work/acre increases (the need to re-work some areas more than once). And an "average" operator correction factor due to more skill required with the increased blade work for this category.

Calculation Factors.

Dozer Speed 1mph = 88ft/min

Cycle length 209ft = 1cycle

70cycles/acre

Cycle Time 2.38min + .33min(manuever time) = 2.71min

Job Efficiency 45min/hr (.75)

Site Condition Factor 10%

Operator Correction Factor 75% efficient. (1.25 in calc)

Dozer Cost/hr \$150.00 (includes adjusted operator wage)

Calculation

$$((209\text{ft/cycle} * 1\text{min}/88\text{ft}) + .33\text{min}) = 2.71\text{min/cycle}$$

$$(2.71\text{min/cycle} * 1.25) = 3.39\text{min/cycle} \quad 1\text{cycle}/3.39\text{min}$$

$$(1\text{cycle}/3.39\text{min} * 45\text{min/hr}) = 13.3\text{cycles/hr} \quad 1\text{hr}/13.3\text{cycles}$$

$$(1\text{hr}/13.3\text{cycles} * 70\text{cycles/ac}) = 5.26\text{hr/ac}$$

Because .26 is greater than 15 minutes, round up to 6 hrs @ \$150/hr

$$\$900.00/\text{ac} * 10\% = \$990/\text{ac}$$

Heavy

The area for this type of work is highly contoured with lots of blade work to create hills, washes, drainages, water-bars, etc. to match existing topography. The reclamation may include large stockpiles, bigger pits/trenches, extensive contouring and longer/more pushes to complete reclamation.

Some of the contributing factors in this calculation include; an even higher maneuver time due to more involved topography and type of work required. A job efficiency rate that is lower, also due to the more involved work. An increase in cycles/acre due to the complexity of the work/acre. An "average" operator correction factor due to the higher skill level involved with the blade work required for this category.

Calculation Factors.

Dozer Speed 1mph = 88ft/min

Cycle length 209ft = 1cycle

105cycles/acre

Cycle Time 2.38min + .42min(manuever time) = 2.8min

Job Efficiency 40min/hr (.67)

Site Condition Factor 10%

Operator Correction Factor 75% efficient. (1.25 in calc)

Dozer Cost/hr \$150.00 (includes adjusted operator wage)

Calculation

$$((209\text{ft/cycle} * 1\text{min}/88\text{ft}) + .42\text{min}) = 2.8\text{min/cycle}$$

$$(2.8\text{min/cycle} * 1.25) = 3.5\text{min/cycle} \quad 1\text{cycle}/3.5\text{min}$$

$$(1\text{cycle}/3.5\text{min} * 40\text{min/hr}) = 11.4\text{cycles/hr} \quad 1\text{hr}/11.4\text{cycles}$$

$$(1\text{hr}/11.4\text{cycles} * 105\text{cycles}/\text{ac}) = 9.21\text{hr}/\text{ac}$$

Because .21 min is less than 15 minutes, round down to 9 hrs @ \$150/hr

$$\$1350.00/\text{ac} * 10\% = \$1485/\text{ac}$$

Dozer Spreadsheet Information

The areas that are being estimated for reclamation with a dozer must be calculated in acre(s) and entered as such in the "Dozer Work" portion of the reclamation cost model. Once the disturbed areas have been calculated, enter the appropriate acreage(s) in the corresponding cells for the type(s) of dozer work needed (Light B5, Moderate B7, Heavy B9).

It is possible to enter the same disturbed area into more than one of the three categories within "Dozer work", for example; If the total disturbance of an operation is two acres, and half of that requires "Heavy" work (1 ac.), and the other half requires "Light" work (1 ac.), enter 1 into cell B9 for the heavy work. If, after the "heavy" work is completed on the one-acre, and half of it needs to be ripped (light work), the total area needing "Light" work would be 1.5 acres (the original acre and the .5 acre after the heavy work). That number would be entered into cell B5. Therefore, in this example there would be a total of 2.5 acres entered in the "Dozer Work" portion of the cost estimate for an operation that is only 2 acres in size.

Roads can be calculated in this section by converting the length and width into acres ($[\text{length}(\text{ft}) * \text{width}(\text{ft})]/43560(\text{ft}^2) = \text{acres}$). Enter the acres in B5 if the road only needs to be ripped, B7 if there will need to be some blade work and B9 if the road will need significant dozer work to complete the reclamation.

Types of Excavator Work

Calculations for this model were based on a reclamation cost model developed by the BLM Nevada State Office (NSO) in collaboration with the Nevada Division of Environmental Protection. The figures in the NSO model were averaged actual costs from recent reclamation efforts where the use of an excavator was the primary equipment involved in contouring. These figures were reviewed and updated in 2002, and that model can be accessed via the BLM internal mineral homepage.

By using the \$/linear foot figures from the NSO model, a \$/acre cost was calculated. Taking the \$1.50/linear foot cost for roads on a side slope less than 30%, and multiplying it by 14 feet (average road width in the NSO model), it returned a cost of $\$1.50/14\text{ft}^2$. Then by multiplying $\$1.50/14\text{ft}^2$ by 43560ft/acre, it returned a cost of \$4667.14/acre (rounded down to \$4665.00 for this model). The

same calculation was done for roads on a side slope greater than 30%, and the result was \$7467.43/acre (rounded down to \$7465.00 for this model).

The \$/linear foot costs from the NSO model and the calculated \$/acre costs are the dollar amounts being used in this model for excavator work. This allows the estimator to enter information in the "Excavator Work" section in either linear feet (basically for roads), or in acres (highwalls and other work not suited for a dozer).

Roads with slope <30%

This method may be used for roads that have an approximate slope of 30% or less. Although it is usually more expensive than dozer work, there may be some conditions that may make this the best choice for the reclamation. Enter the linear foot measurement in cell B16 for the cost calculation.

Roads with slope >30%

This may be used when the roads are on steeply dipping hillsides with a side slope greater than 30%. The model calculations are figured with an average road width of 14 feet (from cut to fill). Because of the steepness of the hillside, this would probably be the best choice of equipment for this type of work. Enter the linear foot measurement in cell B30 for the cost calculation.

Non-Roads with side slope <30%

This method of calculation can be used on wider areas where pads/disturbances have been created for drilling or mining on hillsides and light slopes. There may be times when this type of equipment would work best in a given situation, especially where the topography leaves little room for maneuvering as needed with a dozer. Enter the acres disturbed in cell B24 for the cost calculation.

Calculation

\$1.50/lnft

Road width = 14ft

Acre = 43560ft²

$$(1\text{ft} \times 14\text{ft}) = 14\text{ft}^2 \quad \$1.50/14\text{ft}^2$$

$$(43560\text{ft}^2/\text{acre} \times \$1.50/14\text{ft}^2) = \$4667.14/\text{acre} \quad \text{Round Down to } \$4665.00/\text{ac}$$

Non-Roads with side slope >30%

Use this section to calculate areas like pads and workings that have been created for drilling and mining on slopes greater than 30%. Also, use this rate on any area

that may require more work/area. For example, highwalls and/or areas with very involved contouring in a tight place where a dozer would not be practical. Once the acreage has been calculated (including any dump or waste associated with the area) enter it in cell B26 for the cost calculation.

Calculation

\$2.40/lnft

Road width = 14ft

Acre = 43560ft²

$$(1\text{ft} \times 14\text{ft}) = 14\text{ft}^2 \quad \$2.40/14\text{ft}^2$$

$$(43560\text{ft}^2/\text{acre} \times \$2.40/14\text{ft}^2) = \$7467.42/\text{acre} \quad \text{Round Down to: } 7465.00/\text{ac}$$

Excavator Spreadsheet Information

For non-road areas where it is determined that an excavator would be the best choice for reclamation, all that is necessary is to determine the acres disturbed and the difficulty of the work. If the work is not involved/difficult and/or the surrounding slopes are less than 30%, enter the acres disturbed in cell B24. If the work will be intensive (pulling down highwalls, steep slopes, heavy contouring, etc.), enter the acres disturbed in cell B26.

All types of excavator work could be conducted at the same site in different areas of the disturbance, so caution must be used to not double charge when calculating the estimate.

Revegetation

Use this section to calculate the cost for seeding the disturbed areas when the earthwork is complete.

This model allows the estimator to enter the areas that need to be seeded in either linear feet (for roads), or acres (for larger areas). It also gives the option of choosing the method of seeding, either with the use of equipment or manually. The NSO model calculated seeding with the use of equipment assuming a seed mix that will result in a diverse plant community that includes grasses, forbs, shrubs and/or trees. It also assumes two passes over the disturbed area. The first pass is to rip the surface and spread the seed, and the second pass is to drag the area. If this method is used, adjustments may need to be made in the "Light Dozer Work" section so double charging for ripping doesn't happen. The second way that seeding can be entered is if seeding is going to be completed manually. This would be completed with the use of a hand spreader. To calculate seeding, simply enter the acres or linear feet in the appropriate cells (B30, B33, B36, B39).

It is possible to have entries in one, or all of these cells depending on the site conditions.

Mobilization

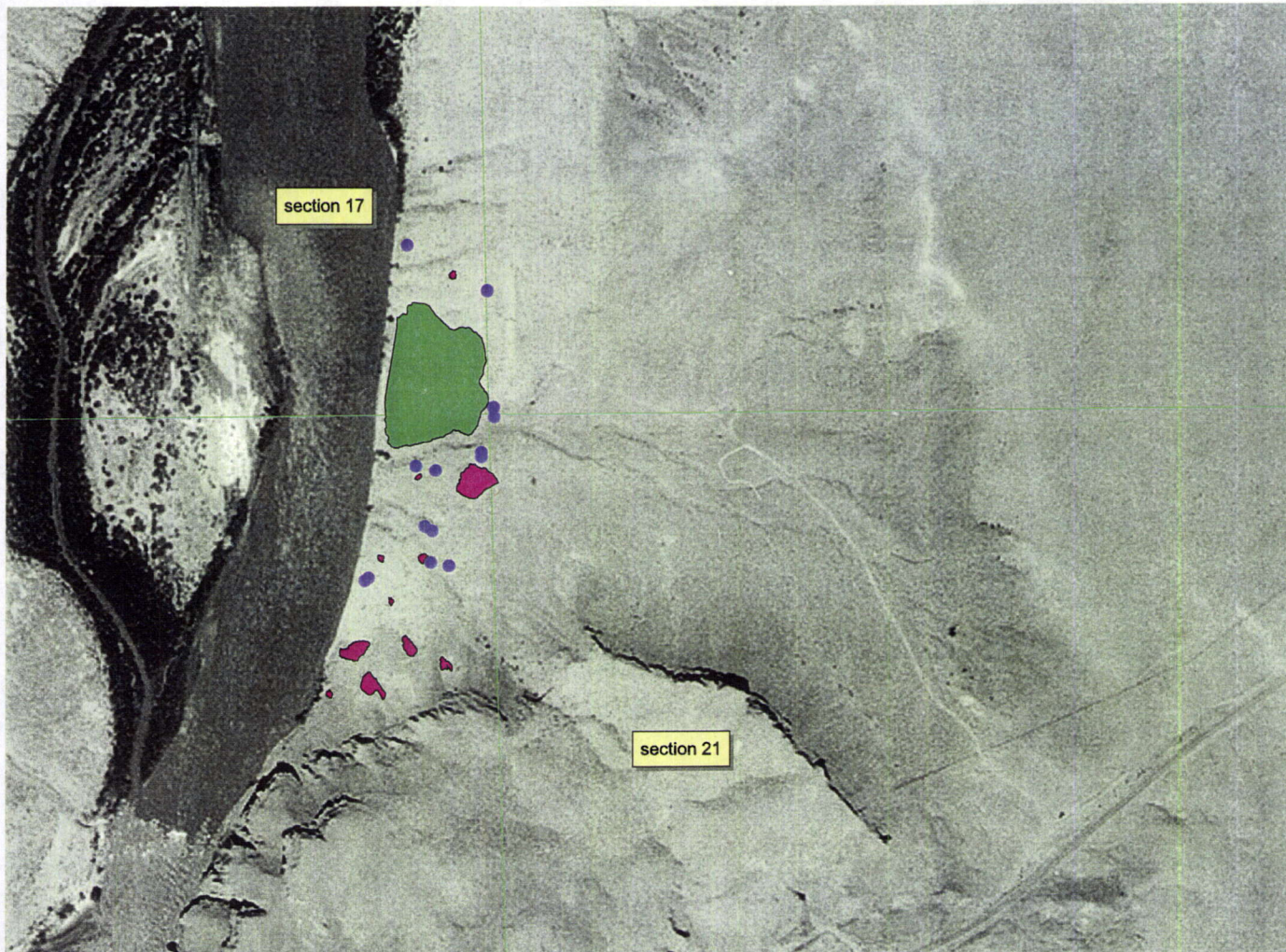
This section will calculate the cost of mobilization/demobilization of the equipment brought on site to complete reclamation. The model has a cost input for the number of transport vehicles that will be required when reclamation commences. The NSO model based this figure on actual averaged mobilization costs with the site being 150 miles from the equipment vendor. That figure was used in this cost model.

Administrative Fees

All of the appropriate administrative fees required by 43 CFR § 3809.554 will automatically be added in to the reclamation cost estimate. These fees include:

- The prime contractor's profit (10%).
- BLM's labor and operation costs for the Field and State Offices to administer the contract (16%).
- A contingency fund to cover unforeseen circumstances related to the Engineering, Design and Construction Plan (10%).
- A fiscal year 2003 indirect cost rate (WO IM No. 2003-011)(17.8%).
- BLM's cost to develop an Engineering, Design and Construction Plan (2%).
- The contractor's liability insurance premium (for contract cost over \$100,000)(1.5%).
- Payment of premiums for both a performance and payment bonds (for contract cost over \$100,000)(3%).

UTU-69828/Payday mining claim and access road



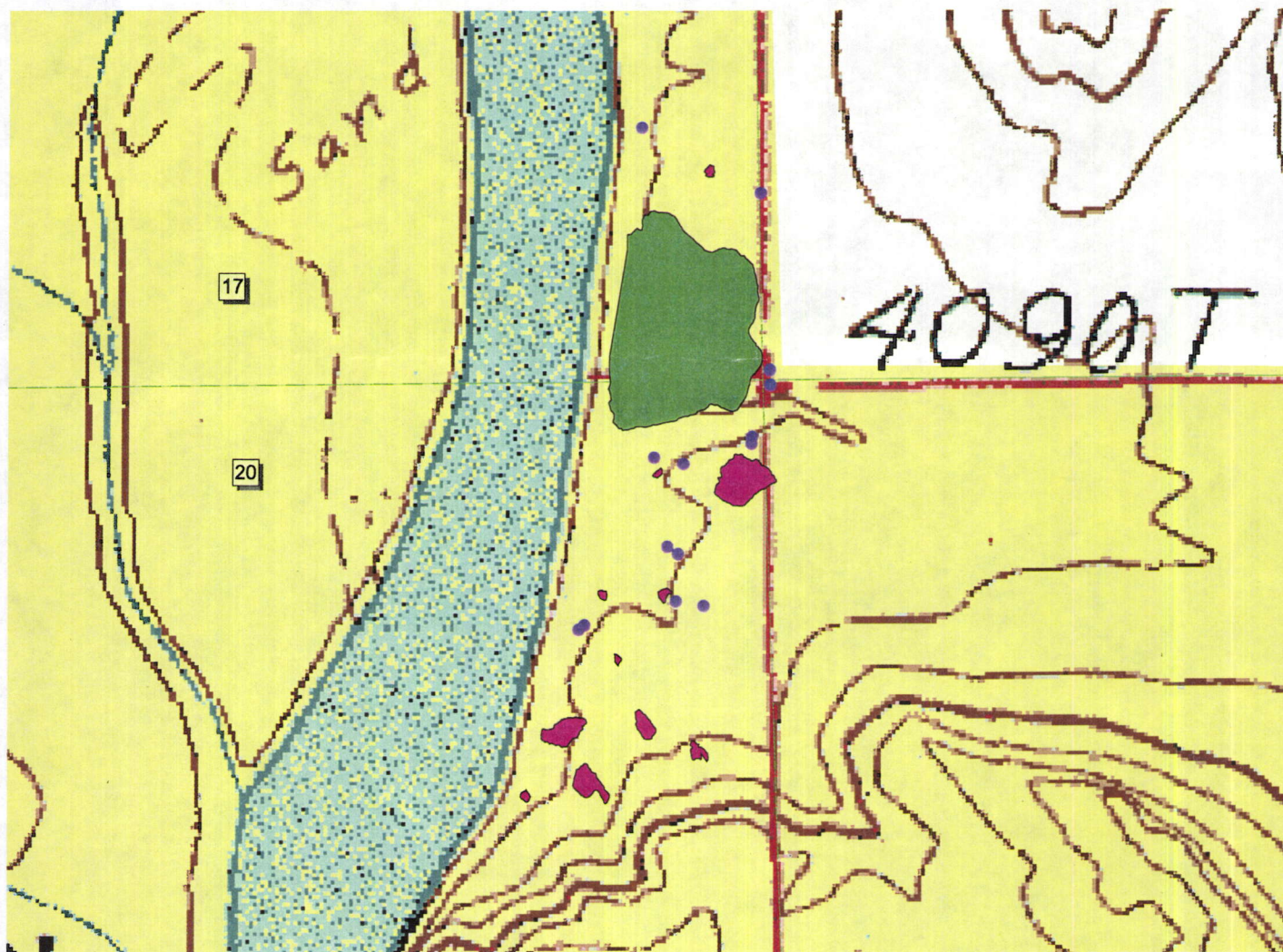
0.2 0 0.2 0.4 Miles

- Perimeter of main disturbance (2.7 acres)
- Point disturbances/piles
- Exploration disturbances (0.5 acres)



scale is 1:4,000
GPS data from 11 July 2003

UTU-69828/Payday mining claim



0.1 0 0.1 0.2 Miles

- Perimeter of main disturbance (2.7 acres)
- Point disturbances/piles
- Exploration disturbances (0.5 acres)

T. 24. S., R. 23 E., sec. 17 and 20
Yellow background indicates BLM surface ownership.
White background in section 16 indicates
private surface ownership.



scale is 1:4,000
GPS data from 11 July 2003